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A Conservative discretization of the shallow-water equations on triangular grids

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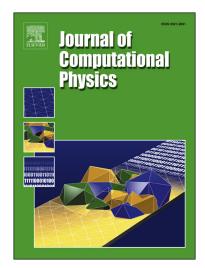
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Highlights

- New spatial discretization of spherical shallow-water equations on triangular grids.
 Preservation of mass, total energy, potential vorticity and potential enstrophy.
- Stationary geostrophic modes are preserved, spurious pressure modes are absent.
- Connection between conservation properties and reconstruction operators established.

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